Control Methods

Mechanical - Scotch thistle is biennial, so destruction of the seedlings, rosettes, and bolted plants before flowering can be an effective control method by eliminating seed production. Scotch seeds germinate throughout the year, so treatment will be needed several times during the growing season.

Biological - There are no biological control agents for Scotch thistle available in the United States. There are several that have been shown to be effective in Australia. When Scotch thistle grows near musk thistle (another noxious weed), the seed weevil Rhinocyllus conicus has infested a few Scotch seed heads.

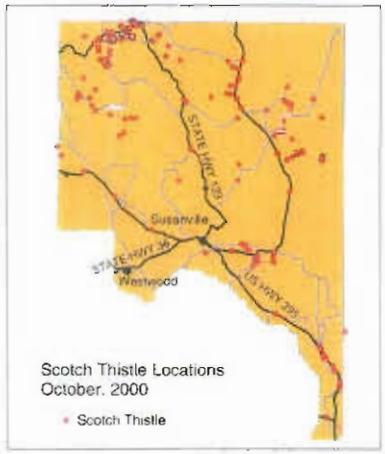
Chemical - Early spring treatments (before bolting) with dicamba or clopyralid can be effective. After the plants start to bolt, a combination of several herbicides are needed for control, such as 2,4-D plus dicamba, 2,4-D plus clopyralid, or 2,4-D plus chlorsulfuron. These treatments will be needed on at least a yearly basis for several years. As always, read and follow herbicide label instructions carefully.

History

Scotch thistle is native to southern Europe and the Mediterranean area through Asia. It is not known how it first came into the U.S. Its common name comes from its early use in Scotland to protect castles from invasion by enemies.

Distribution

Scotch thistle is widely and sparsely scattered across the United States. Several large infestations occur in Modoc and Lassen Counties.



For More Information:

- Bureau of Land Management's Eagle Lake Field Office at (530) 257-0456
  http://www.ca.blm.gov/eaglelake/noxweeds.html
- University of California Cooperative Extension Office at (530) 251-8133
- Lassen County Department of Agriculture at (530) 251-8110

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Scotch Thistle

AKA: *Onopordum acanthium*

A Giant Problem!

Lassen County
Special Weed Action Team
www.cdfa.ca.gov/wma

2001

Why should I care about noxious weeds?

When noxious weeds spread, they impact the environment. They reduce the biodiversity of native plant communities and rapidly replace other plants that provide habitat for wildlife and food for people and livestock. Some weeds are poisonous to livestock.

Weeds also have an economic impact by reducing the land's productivity and by decreasing the quality and value of crop and livestock production. Some noxious weeds are so competitive that they crowd out all other desirable plants.

Weeds can increase maintenance costs and reduce the usefulness and value of recreation areas. Who wants to hike in yellow starthistle or Scotch thistle?

Watch out for these roadside infestations!

What can I do?

- Drive only on established roads and trails away from weed-infested areas.
- When using pack animals, carry only feed that is certified weed free.
- Beginning 96 hours before entering backcountry areas, feed pack animals only food that is certified weed free.
- Remove weed seeds from pack animals by brushing them thoroughly and cleaning their hooves before transporting.
- If you find a few weeds without flowers or seeds, pull them and leave them where found. If flowers or seeds are present, place the plants in a plastic bag or similar container and then dispose of them.
- Don't pick the flowers of these weed species and take them home. They are very competitive and can easily trigger a new infestation in your own backyard.
- If you find a weed-infested area, let the land owner or manager know so that they can take steps to control the weeds (or notify your local Department of Agriculture).
- Noxious weed seeds or plant parts may attach themselves to tires, shoelaces, camping equipment, construction equipment, garden tools, or any other surface that contacts an infested area. These seeds or plant parts can then travel hundreds of miles before falling to an uninfested area. To avoid starting a new infestation, please clean all surfaces before leaving any area.

What does Scotch thistle look like and how does it grow?

HABITAT: Scotch thistle grows best in disturbed, open areas. It can form thick stands that cannot be penetrated by people or animals.

GROWTH: Scotch thistle is a biennial (it lives for two years) whose stems, leaves, and flowers are covered with long, sharp spines. It grows the first year in a large (18 inches or more across) rosette; the leaves, which have spiny and wavy edges, remain close to the ground. During the second year, plants send up several stout stems. Stems have broad, spiny wings and are covered with dense, cotton-like hairs. Stem leaves are also spiny, somewhat cottony, and large for a thistle.

FLOWERS: Flowers are violet to reddish in heads 1 to 2 inches across. The base of the flower head has numerous green spines sticking up and out.

HEIGHT: Scotch thistle is a huge (up to 12 feet tall) taprooted plant.

SEEDS: The seeds are small and tipped with slender bristles. Scotch thistle plants can each produce 20,000 to 40,000 seeds. Seeds can remain viable in the soil for many years.